

Listing of Claims:

1. (Cancelled)
2. (Previously Presented) A process according to Claim 12 wherein said representation of the coding decision comprises an information bus in which the coding decisions are represented in the same format as they are represented in the compressed bitstream which is the output of said downstream compression coding operation.
3. (Previously Presented) A process according to Claim 2, wherein said analysis generates information relating to picture size and type.
4. (Previously Presented) A process according to Claim 12, wherein said analysis comprises the generation of candidate motion vectors.
5. (Original) A process according to Claim 4, wherein said analysis comprises the selection for each macroblock of the picture of a motion vector from said candidate motion vectors.
6. (Original) A process according to Claim 5, in which said analysis comprises the selection of a macroblock prediction mode.
7. (Previously Presented) A process according to Claim 12 wherein said analysis includes a bit rate control and the taking of quantizer decisions appropriate to maintenance of a selected bit rate.
8. (Previously Presented) A process according to Claim 5 wherein plural bit rates are selected and plural quantizer decisions are taken.
9. (Currently Amended) Compression pre-processing apparatus, comprising

a coder for analysing an input video signal at a picture rate and at a macroblock rate and taking compression coding decisions for the input video signal, the compression coding decisions including picture rate coding decisions and macroblock rate coding decisions for the input video signal, said macroblock rate coding decisions including motion vectors;

a processor for processing the coding decisions; and

an output for outputting, from the compression pre-processing apparatus, the processed coding decisions so that the processed coding decisions are integrated for passage with the input video signal for passage along a video pathway, wherein the input video signal which is passed along the video pathway with the ~~representation of the~~ processed coding decisions undergoes no processing other than delay.

10. (Previously Presented) Apparatus according to Claim 9, wherein said processor for processing the coding decisions provides a representation of the coding decisions in the form of a compressed video bit stream lacking transform coefficients.

11. (Cancelled)

12. (Currently Amended) A video signal process comprising the steps of: in a compression coding step,

analyzing an input video signal at a picture rate and at a macroblock rate and taking compression coding decisions including picture rate coding decisions and macroblock rate coding decisions for the input video signal, said macroblock rate coding decisions including motion vectors;

forming a representation of the coding decisions;[[:]]

outputting said representation from the compression coding step; ~~and passing~~

integrating the representation of the coding decisions along a video pathway with the input video signal;

passing the integrated representation of the coding decisions and input video signal along a video pathway; and

downstream of the video pathway, compression encoding the input video signal in accordance with said coding decisions, wherein the input video signal which is passed along the video pathway with the representation of the coding decisions undergoes no processing other than delay.

13. (Cancelled)

14. (Currently Amended) A video signal process comprising the steps of: in a compression coding step,

passing an input video signal along a first pathway;

analyzing ~~an~~ the input video signal and taking compression coding decisions which are capable of enabling a downstream encoder to slave to the coding decisions and compression encode the input signal at a bit rate determined by the coding decisions;

forming a representation of the coding decisions;

outputting said representation from the compression coding step;

integrating the representation of the coding decisions with the input video signal from the first pathway to create an integrated signal; and

passing the integrated signal representation along a second video pathway ~~with the input video signal; and~~

downstream of the second video pathway compression encoding the input video signal in accordance with said coding decisions, wherein the input video signal which is passed along the video first pathway with the representation of the coding decisions undergoes no compression processing.

15. (Currently Amended) Compression pre-processing apparatus [[,]] comprising:

a coder for analysing an input video signal and taking compression coding decisions which are capable of enabling a downstream encoder to slave to the coding decisions and compression encode the input signal at a bit rate determined by the coding decisions;

a processor for processing the coding decisions; and

an output for outputting, from the compression pre-processing apparatus, the processed coding decisions ~~for passage~~ integrated with the input video signal to create an integrated signal.

the output passing the integrated signal along a video pathway, wherein the input video signal which is passed along the video pathway with the processed coding decisions undergoes no compression processing.

16. (Cancelled)

17. (Previously Presented) A video signal process according to Claim 14, wherein said input video signal is modified to carry said representation in one or more of the least significant bits of the input video signal.

18. (Previously Presented) A video signal process according to Claim 14, wherein said input video signal is modified to carry said representation in a data channel of the input video signal.

19. (Previously Presented) A video signal process according to Claim 14, wherein said input video signal is modified to carry said representation in an audio channel of the input video signal.

20 – 24. (Cancelled)

25. (Currently Amended) A video signal process comprising the steps of:

passing an input video signal along a first pathway;

in a compression coding step and along a second pathway, analyzing ~~an~~ the input video signal and taking compression coding decisions which contain all the decisions necessary for the creation of a compressed bitstream apart from those decisions relating to quantization;

forming a representation of the coding decisions;

outputting said representation from the compression coding step and integrating ~~passing~~ the representation ~~along a video pathway~~ with the input video signal from the first pathway; and

downstream of the ~~video~~ second pathway compression encoding the input video signal in accordance with said coding decisions, wherein the input video signal which is passed along the ~~video~~ first pathway ~~with the representation of the coding decisions~~ undergoes no compression processing.

26. (Previously Presented) Compression pre-processing apparatus, comprising a coder for analysing an input video signal and taking compression coding decisions which contain all the decisions necessary for the creation of a compressed bitstream apart from those decisions relating to quantization; a processor for processing the coding decisions and an output for outputting, from the compression pre-processing apparatus, the processed coding decisions for passage with the input video signal along a video pathway, wherein the input video signal which is passed along the video pathway with the processed coding decisions undergoes no compression processing.